

Oath/declaration

The Examiner states that the oath/declaration does not identify the citizenship of each inventor.

Drawings

The Examiner objects to the drawings under 37 CFR 1.83(a) that the drawings must show every feature of the invention specified in the claims. The Examiner says that in "...Claim 1, page 9, line 10, the turntable or thrust bearing" must be shown or the feature cancelled from the claim.

The Examiner states that corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application.

Claim rejections under 35 USC § 112

The Examiner states that Claim 1 recites the limitation "turntable bearing" in line 10 and that there is an insufficient antecedent basis for this limitation in the claim

Claim rejections under 35 USC § 102

The Examiner has rejected Claims 1-8 under 35 USC 102(b) as being anticipated by Andol (US 6,086,082).

With respect to Claim 1, Andol'082 (referring to FIGS. 1-15) discloses a system 10 comprising a bearing plate 64,82 rear portion 28, truck or trailer 10, positioning means 112,114, rotation stop means 140, 150, 76, 78, mounting frame 40, first frame section 109, second frame section 109, lateral beams 36, first frame rail 18, second frame rail 18, bracket 64, turntable or thrust bearing 66,72, first wheel assembly, 60, second wheel assembly 60, first rotation lock 140, second rotation lock 140, bumper 30, 32, first bumper tab 115, and second bumper pad 115, first travel lock, col. 7, lines 9-11 and second travel lock, col. 7, lines 9-11. The Examiner comments that Andol anticipates that two travel locks may be employed, col. 7, lines 14-15.

With respect to Claim 2, (referring to FIGS. 6-8) the Examiner claims that Andol'082 discloses an arc shaped bearing plate 64,82.

With respect to Claim 3, (referring to FIG. 6) the Examiner claims the Andol'082 discloses

a bearing plate 64, 82 having holes as defined by apertures shown in FIG. 6.

With respect to Claim 4, (referring to FIG. 6) the Examiner claims that Andol'082 discloses a first travel stop 150 and a second travel stop 150. The Examiner also comments that Andol'082 is not limited to allowing travel of the mounting plate to 180 degrees in an x-y plane, but also allows rotation in a y-z plane.

With respect to claim 5, (referring to FIG. 6) the Examiner states that Andol'082 discloses a first travel stop 150, and a second travel stop 150 which allows 180 degrees of rotation.

With respect to claim 6, (referring to FIG. 6-8) the Examiner says that Andol'082 discloses a first rotation lock 150, a mounting bracket 76, a horizontal plate 82, hole, spring loaded pin 140, 142, 144, second rotation lock 150, mounting bracket 76, horizontal plate 82, hole, spring loaded pin 140, 142, 144.

With respect to Claim 7, (referring to FIG. 1-5) the Examiner claims that Andol'082 discloses a first travel lock, lock tab 115, hole in travel lock tab, bumper tab 114, hole in first bumper tab, second travel lock, lock tab 115, hole in travel lock tab, bumper tab 114, and a hole in second bumper tab, and first and second pit pins 150. The Examiner comments that Andol'082 anticipates the alignment of first and second travel lock tabs in Col. 7, lines 3-19.

With respect to Claim 8, (referring to FIG. 6) the Examiner states that Andol'082 discloses a first bumper tab 114 angled to a truck or trailer, and a second bumper tab 115 angled to a truck or trailer. The Examiner comments that Andol'082 anticipates that two travel locks may be employed (see Col. 7, lines 14-15).

AMENDMENTS

In the Claims

Claim 1, line 10 (currently amended): "...attached to a turntable ~~or thrust~~ bearing, said turntable bearing..."

REMARKS

Information Disclosure Statement

The applicant believes that an information disclosure statement was submitted with the

original application. However, another Information Disclosure Statement will be included with this Response to ensure that the Examiner has a copy of the document.

Oath/Declaration

A Supplemental oath/declaration form will be submitted with this Response identifying the citizenship of the inventor.

Drawings

The applicant believes that the original drawings show the “turntable or thrust bearing”. Please refer in the original drawings to Figure 10, item 90. Support for that being a “turntable or thrust bearing” is found in the Specification, Page 7, lines 12-14 “Referring to figures ten through twelve...**A rotating slip, thrust or turntable bearing (90)** is shown mounted to the truck or trailer bed at this center position (88).”.

Claim rejections under 35 USC § 112

Applicant believes that Claim 1 has been amended sufficiently to establish an antecedent basis for the limitation “...turntable bearing...” in this claim.

Claim rejections under 35 USC § 102

The Examiner has relied upon Andol’082 (supra) primarily as a basis for rejection of the current invention.

Andol’082 reveals an Easy Off Snowmobile Trailer with a 180 degree rotatable platform and independently tiltable decks for onloading and offloading of each snowmobile.

The current invention, however, shows a device that is installed onto a flat non-movable (stationary) truck bed or trailer bed, allowing a valve operator to be positioned over a valve cover, found primarily in a street or adjacent to a street, without requiring repositioning of the truck to open the valve cover.

Fundamental differences can be found between the Andol’082 invention and the current invention. For example, the Andol’082 invention utilizes a rotatable platform that consists of a

central bearing, a set of casters (wheels) (60) to support the platform and allow the platform to rotate around the central bearing. The casters are spaced circularly at about 16 to 24 inches from the rotational axis (55) of the platform. In order to allow the split deck to tilt, which allows the snowmobiles to be removed from the deck, the platforms are pivotably attached to the frame, where the frame is attached to the rotational axis (55). The method that is described by Andol'082 to allow the frame to pivot is:

“The elongate rotary frame 64, which has a width slightly greater than the diameter of the imaginary circle defined by the orientation of the casters 60 and which supports the platform 18, as hereinafter described, rests on top of the casters 60 for rotational movement thereon. A stub shaft 72 is received in an axle frame aperture 74 which is at the center of the imaginary circle. The stub shaft 72 is welded to the axle frame 40 so as to extend upwardly therefrom. The stub shaft 72 is received in a bearing (not shown) of a rotary pivot assembly 66 so that the assembly 66 is rotatable about the stub shaft. The pivot assembly 66 has a flange 67 and has a portion 69 which is received in an aperture 71 in the lower wall 73 of a centrally positioned beam portion or channel member 68 of the rotary frame, the channel member being rectangular shaped in section. The flange 67 is mounted to the beam lower wall 73 such as by a plurality of fasteners 70 so that the rotary frame 64 is rotatable relative to the axle frame 40 through 360 degrees whereby the platform 18, attached to the rotary frame 64, as hereinafter described, is rotatable through 360 degrees.”(p6 line 1 - 20 Andol Patent)

DISCUSSION

CLAIM 1:

the Examiner states that Figs. 1-15 of Andol'082 discloses a system 10 comprising a bearing plate 64,82, rear portion 28, truck or trailer 1, positioning means 112, 114, rotating stop means 140, 150, 76,78, mounting frame 40, first frame section 109, second frame section 109 (?) Lateral beams 36, first frame rail 18, second frame rail 18 (?), bracket 64, turntable or thrust bearing 66, 72, first wheel assembly, 60, second wheel assembly 60 (?) first rotation lock 140 (?), bumper 30,32 , first

bumper tab 115, and second bumper tab 115, first travel lock, col. 7 lines 9-11 and second travel lock col. 7 lines 9-11.

Application 10/700,390 discloses a fixed rear truck bed with a rotatable valve operator arm that is intended to operate only on a flat truck bed which is positioned at predesignated positions using rotation locks versus the Andol'082 invention, which uses a rotatable deck with separate smaller decks allowing snowmobiles to be elevated for transport or lowered for use.

The current invention uses a first and second rotation lock in conjunction with the Swiveling Valve Operator Mounting System 1 to positively locate the valve operator at preset positions, in order to open valves when the truck is stopped and at a work site. The travel locks disclosed in application number 10/700,390 are intended to prevent unwanted rotation of the system during travel, but is also designed to transfer any up and down motion of the valve system into the bumper of the truck. The pit pins used in application number 10/700,390 lock the valve operator in place and prevent any rotational motion of the valve operator. The purpose for the travel locks and brake system taught in Andol'082 is to only prevent undesirable rotation of the rotatable deck during travel of the truck from one location to another.

Andol'082 does not teach using travel stops when the truck has stopped for loading or unloading the snowmobiles. Therefore, logically, the current invention and the Andol'082 invention are not built the same and are not designed to work in the same manner.

The patent attorney is permitted to be his own lexicographer, and as such, it very likely that different attorneys may use the same phrase to denote different components on differing inventions. As was previously explained the use of the nomenclature "travel stop" in Andol'082 and the present invention have different uses, purposes and components. At first blush, the nomenclature "travel stop" seems to define the same component between the Andol'082 patent and the present invention, but under closer examination, the "travel stop" is actually quite different.

CLAIM 2:

The Examiner states that Figs. 6-8 of Andol'082 discloses an arc shaped bearing plate 64,82. Column 6 line 1 discloses an **elongate** rotary frame 64. The elongate rotary frame 64, as disclosed and described in the Andol'082 patent is actually rectangular in shape (in plan view) and not arc

shaped as claimed by the Examiner.

The elongate rotary frame, 64, is supported by about 6 casters 60 (col 5 line 44). The casters 60 are attached to the frame 40 (col 5, line 48) and are aligned circularly with each other (col 5 line 49). The casters are positioned to rotate generally on an imaginary circle circumference (col 5 line 49-51). The casters 60 support the platform at a substantial distance from its rotational axis 55 . . . The plurality of castors also provide increased bearing surface area, which also makes easier the turning of the platform (col 5, line 51-55).

Column 6 line 37 describes a pair of **triangular-shaped brackets 82**, which have apertures, illustrated at 84.

Figure 2 of the present invention clearly illustrates that the bearing plate 14 that is disclosed and described in the present invention is arc shaped, which is not similar to the elongate rotary frame 64, that is disclosed and described by Andol'082.

CLAIM 3:

The examiner states that in Fig. 6, Andol'082 discloses a bearing plate 64,82 having holes as defined by those apertures as shown below. Nowhere in the body of the patent are any holes or apertures described. Figure 6 **shows** 4 holes that **appear** to be lightening holes, and have no other purpose to the invention. In fact, since Andol'082 does not claim the holes, or have any worded disclosure of the holes, it may be concluded that the holes have no purpose and have no specific function to the patent.

In the current invention, the holes in the bearing plate are disclosed and described:

“The bearing plate (14) has a series of holes (30) defined therein said series of holes (30) being arcuate shaped on said bearing plate (14). The arcuate series of holes (30) are located on an outer section (32) of the bearing plate (14), and are spaced at two inch (2") increments within the permissible travel of the mounting frame (6).” (Page 5, lines 3-7)

Additionally, the holes (30) have a specific purpose, that is also disclosed and described:

“A first rotation lock assembly (54) is shown attached to the first frame section (36). The first rotation lock assembly (54) consists of a second mounting bracket (56). The second mounting bracket has a horizontal plate (58) and a vertical plate (60). The horizontal plate

(58) and the vertical plate (60) are attached at ninety degrees (90°) to each other. The horizontal plate (58) has a hole (62) defined therein, the hole (62) allows a retractable spring loaded pin (64), common in the industry, to be attached therethrough. The hole (62) is positioned to be in line with any one of the series of holes (30) defined in the bearing plate (14). The first rotation lock assembly (54) is attached to the first frame section (36). A second rotation lock assembly (66) is attached to the second frame section (38).” (Page 6, lines 5-13).

Therefore the apertures shown in Andol’082 do not serve any purpose or function in the operation of the invention, while the holes in the bearing plate of the present invention have specific function to the operation of the invention.

CLAIM 4:

The Examiner states that in Fig 6. Andol’082 discloses a first travel stop 150 (140?) and a second travel stop 150.

“**a passive brake 140** (emphasis added) (described hereinafter) may be adjusted to hold the deck 24 in the inclined position, as shown in Figs. 1 and 2, until some additional force is exerted by a person or otherwise to force the deck 24 to the horizontal or level position shown in Fig. 3. Alternatively, the brake 140 may be adjusted so that, as the sled is driven forwardly, its weight on the deck front will overcome the restraining force for the brake 140 and move (see-saw_ the deck 24 from th tilted to the horizontal position or level orientation, as seen in Fig. 3.” (Col 3, lines 47-56)

The Andol’082 patent describes a brake assembly (140) as herein described:

“Referring to FIGS. 11 and 12, in order that each deck may passively be controllably yet easily tilted to the rear for loading or unloading sleds and controllably raised to the level position for transport as well as to hold the deck at a desired position such as in the down position for loading or unloading a sled, a brake assembly, illustrated at 140, is mounted on the outboard end of each pivot rod 86. By "passively" is meant that the brake assembly 140, after it is suitably adjusted as hereinafter discussed, acts to dampen deck tilting movement without any action required of the operator of the trailer. The brake assembly 140 includes

a drum 142 suitably fixedly (non-rotatably) mounted on the pivot rod 86 and a friction band 144 extending circumferentially substantially around the drum 142 for engaging the drum 142 with a desired tightness for retarding or dampening rotation of the pivot rod 86. Thus, one end of the band 144 is suitably anchored as at 146 and the other end thereof is suitably attached to a threaded rod which is threadedly received in a threaded aperture in fixed support bracket 148 and suitably threadedly attached to handle 150 wherein, by rotation of handle 150, the tightness of the band 144 on the drum 142 can be adjusted to achieve a desired amount of braking as the respective deck is tilted downwardly and to prevent undesirably rapid movement to the level position as a heavy sled is driven onto the deck.” (Col7 line 20-44)

The examiner, in the office action, describes the rotation stop means as 140, 150, 76, 78. The Andol’082 patent, as previously stated does not call out a rotation stop means, but a brake assembly. The brake assembly that Andol’082 defines is specifically needed to frictionally retard the free rotational motion of the platform(18). While it is conceivable that the brake means 140 may be tightened enough to prevent any rotation of the platform, the actual purpose of the brake means 140 is to provide enough resistance as to allow an operator to easily control the rotation of the platform, preventing unrestricted rotational motion, and preventing injury.

Application number 10/700,390 describes the travel stops as follows:

“A first travel stop (24) and a second travel stop (26) are each positioned and attached onto the bearing plate (14) at the maximum angular travel limits of the mounting frame (6). The travel stops (24, 26) are made from standard structural shapes common in the industry, and have elastomeric bumper stops (28) attached thereon. The elastomeric bumper stops (28) prevent scuffing or damage to the mounting frame (6) when moved to the maximum angular position.” (p 4 lines 24-25, p5 lines 1-3)

(Col7 line 20-44)

Figure 2 of the present application shows a plan view of the invention installed onto a trailer bed. The travel stops 24, 26 are shown at the edges of the arc shaped bearing plate 14. As can be seen, the purpose of the stops is not to provide restricted rotational motion by providing resistance

for operator control, but to prevent rotational motion beyond a specific angular rotation. Without the stops, 24, 26, the Swiveling Valve Operator Mounting System 1, could and would impact the rear structure of the trailer or truck bed causing damage to either the Swiveling Valve Operator Mounting System 1, or the rear structure. The Swiveling Valve Operator Mounting System 1 is free to rotate about its axis without any frictional resistance due to a brake system, as is disclosed in the Andol'082 patent.

We can logically conclude that the brake system 140 disclosed in the Andol'082 patent does not anticipate the travel stops 24,26 of the present application. Although Andol'082 mentions use of travel stops with or without the brake system 140 in the alternative embodiments, Andol'082 uses travel stops for an entirely different purpose than in the current invention as previously discussed.

CLAIM 5:

The examiner refers to Fig. 6 of Andol'082 disclosing a first travel stop 150, and a second travel stop 150 which allows 180 degrees of rotation. Applicant must point out that 140 is defined at col 3 line 48 as a passive brake, and at col 3 line 65 as a light protective members. Additionally, Fig. 6 shows element number 140 in two separate locations disclosing different components for the patent. Element number 150 is disclosed as a handle, which is shown in Figs. 11 and 12. Applicant must point out that nowhere in the Andol'082 patent is element number 150 disclosed or described as a travel stop.

Applicant therefore is unable to adequately respond to the Examiners rejections of claim 5 since no such item numbers seem to exist in the referenced drawings. Applicant respectfully requests for additional clarification, or if amenable to the Examiner, removal of the rejection.

Applicant must point out that the light protective members that are defined by numeral 140 are used not as stops, but as guards to prevent damage to the rotating bed. The ground is the stop that prevents any further motion, which is in direct contrast to the travel stops described in patent application 10/700,390.

CLAIM 6

In the Andol'082 patent, the Examiner states that the Andol'082 patent discloses a first

rotation lock 150 as well as hole, spring loaded pin 140, 142, 144. In the Andol'082 patent, item 150 is described as a rotatable handle (In the Detailed Description, column 7, lines 39-40 of Andol'082 patent) and items 140, 142 and 144 are described as brake assembly 140, drum 142 and friction band 144 respectively (In the Detailed Description, column 7, lines 25-40). Similarly for the second rotation lock mentioned by the Examiner.

As mentioned above in Claim 4 of the Discussion, the brake assembly functions differently from a spring loaded positional lock.

In Figure 1 in Andol'082 patent, the inventor discusses a lock assembly including a clamp 114 which is hingedly attached at 113 (In the Detailed Description, Column 7, lines 5-15) to prevent undesirable tilting and rotational movement of the decks. But this device has only one point of attachment at 113 and is not taught by the Andol'082 patent as a series of positional stops for a device (valve operator) as in the current invention. It's simply a single point lock mechanism designed specifically to prevent rotational motion of the platform 18 and the decks 22 and 24 during the transport of the trailer 10, and is not used to positionally lock the trailer in position when the trailer is in use i.e. removal of the snowmobile.

Claim 6 of application number 10/300,790 defines the first and second brackets that have horizontal plates that are in a parallel relationship to the bearing plate, and the holes in the brackets are aligned with the holes in the bearing plate. Claim 6 does not describe a brake assembly as is disclosed and described in Andol'082, where the brake assembly is described as an operator aide, and not specifically for locking the trailer into a specific orientation, although it may be deduced that the brake assembly may also perform that function.

CLAIM 7

The Examiner refers to Fig. 1-5 of the Andol'082 patent disclosing a first travel lock, lock tab 115, hole in travel lock tab, bumper tab 114, hole in first bumper tab, second travel lock, lock tab 115, hole in travel lock tab, bumper tab 114, and a hole in second bumper tab, and first and second pit pins 150. The examiner makes not that Andol'082 anticipates alignment of first and second travel lock tabs at Col. 7. lns 3-19.

“The first frame rail (40) has a first travel lock tab (68) defined thereon. The first travel lock tab (68) has a first central hole (70) defined therein. This embodiment shows the first travel lock tab (68) oriented downwards at forty five degrees (45°) from the horizontal. The second frame rail (42) has a second travel lock tab (72) defined thereon. The second travel lock tab (72) has a second central hole (74) defined therein. The first travel lock tab (68) and the second travel lock tab (72) are essentially in a planar relationship. A bumper (76) is shown attached to the rear of the truck or trailer. The bumper (76) extends outwards from the truck or trailer, protecting the mounting frame (6) from damage. A first bumper tab (78) is shown attached to the bumper (76). The first bumper tab (78) has a third central hole (80) defined therein. The third central hole (80) of the first bumper tab (78) is diametrically aligned with the first central hole (70) of the first travel lock tab (68). A second bumper tab (82) is shown attached to the bumper (76). The second bumper tab (82) has a fourth central hole (84) defined therein. The fourth central hole (84) is diametrically aligned with the second central hole (74) of the second travel lock tab (72). The first and second bumper tabs (78, 82) are positioned over the first and second travel lock tab (68, 72), respectfully, thereby preventing unwanted vertical and horizontal motion of the mounting frame (6) while in transit. A first pit pin (83) is shown inserted through the first central hole (70) and the third central hole (80), and a second pit pin (86) is shown inserted through the fourth central hole (84) and the second central hole (74), locking the mounting frame to a travel position.” (Pg 6 line 24 - page 7 line 14)

Andol'082 describes the lock assembly as follows:

“In order to prevent rotation of the platform 18 as well as tilting of the decks such as during transport, a lock assembly 112 is provided which includes a clamp 114 which is hingedly attached, as at 113, to the upper forward edge portion, centrally thereof, of the T -bar 110. With the decks resting on the T-bar layer 107, the clamp 114 is swingable into position to clampingly and detachably engage the inboard edges of both decks 22 and 24. A fixture 115 is attached to a deck, and a pin is insertable in apertures in the fixture 115 and in the clamp 114 for locking the clamp in clamping position. Thus, the lock assembly is provided to prevent undesired tilting and rotational movement of the decks. It should be understood that

other suitable means may be provided for locking the decks to the T -bar 110 to prevent rotation thereof such as, for example, an individual clamp for each deck. In addition, the decks may be suitable.” (Andol’082 Col7 lns. 3-19)

An analysis of Andol’082 and figures 1 through 6 shows that the lock assembly disclosed and described is in a vertical plane, normal to the x-y axis, or the ground plane. In engineering analysis, this shows that the lock assembly can only accommodate a vertical or shear load that is transferred by the fixture 115 to the pins, and clamp 114. In application number 10/700,390, figures 4 and 5, the travel lock is specifically shown at an angle to a ground plane or truck bed. This in effect transfers any loads due to travel (up and down) from the flanges of the travel lock 68,72 to the bumper tabs 78,82 and does not solely rely upon the pit pins to prevent motion. The Andol’082 patent does not anticipate the specific relationship of the travel locks, 68,72 and bumper tabs 78,82 to the ground plane. Additionally, the lock assembly has a clamp that is hingedly attached to the T-bar. Application number 10/700,390 does not have any definable relative motion between the bumper tabs 78,82 and the bumper 76, nor between the travel lock 68,72 and the frame rails 40,42. The design of the the travel locks, 68,72 and bumper tabs 78,82 in application number 10/700,390 prevents any vertical motion. In other words, the the travel locks, 68,72 and bumper tabs 78,82 of the present application prevent any vertical movement and rely specifically upon the pit pins to prevent any unwanted rotation of the invention.

The Andol’082 patent claim 9 says:

“A trailer according to claim 1 further comprising means for preventing rotational movement of said decks when tilted.” (Col 10, lns 53-54)

It must be noted that the intent of the word tilted as used in Andol’082 is disclosed and described as a rotary motion of the truck (trailer) bed, and not a rotation of the truck (trailer) bed as disclosed and described in application number 10/700,390

When the Andol’082 patent claim 9 is viewed in context with the figures and the detailed description, we may conclude that there are significant differences between what is intended by Andol’082 and the current invention as previously discussed.

CLAIM 8

The examiner refers to Fig. 6 of Andol'082 which discloses a first bumper tab 114 angled to truck or trailer, and a second bumper tab 115 angled to truck or trailer. It is noted that Andol'082 anticipates that two travel locks may be employed. Col. 7 lines 14-15.

As discussed previously, Figs. 1-6 show that the lock assembly that is disclosed and described by Andol'082, is normal to the ground plane (vertical orientation). Nowhere in the body of the patent, does Andol'082 disclose or describe that the lock assembly is angled to the ground plane, yet application number 10/300,790 specifically discloses and describes that the travel locks, 68,72 and bumper tabs 78,82 are angled, which are specifically shown in Figs. 4 and 5. Claim 8 specifically says that the first and second bumper tabs are oriented at an angle to a horizontal plane defined by said truck or trailer bed . . . Andol'082 does not make a disclosure of that type.

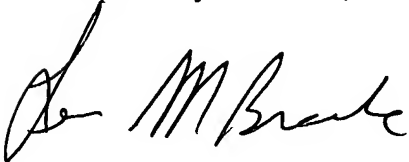
CONCLUSION

In summary, we believe that the Examiner has failed to state a prima facie case of obviousness for the current invention.

This rejection is believed to be overcome for the reasons stated above.

In view of the above, it is submitted that the claims are in condition for allowance. Reconsideration and withdrawal of the rejections are requested. Allowance of claims 1-8 at an early date is solicited.

Respectfully submitted,

 5-13-08